

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte VALERIE CLAVERIE,
CHRISTINE CECUTTI,
ZEPHIRIN MOULOINGUI,
ANTOINE GASET, and
CATHERINE LE HEN FERRENBACH

Appeal No. 2002-1364
Application No. 09/402,761

ON BRIEF

Before WINTERS, WILLIAM F. SMITH, and MILLS, Administrative Patent Judges.

WINTERS, Administrative Patent Judge.

DECISION ON APPEAL

This appeal was taken from the examiner's decision rejecting claims 11 through 20, which are all the claims pending in this application.

The Invention

Applicants' invention relates to a process for making carbohydrate partial esters having a degree of esterification from 1 to 6 comprising: (a) providing a catalytically active mixture containing an alkali metal carbonate and a fatty acid lower alkyl ester;

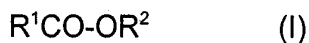
(b) providing an emulsifier mixture containing a glycoside component having from 5 to 12 carbon atoms and a carbohydrate partial ester; and (c) combining the catalytically active mixture with the emulsifier mixture, with vigorous stirring, to form an emulsion/dispersion containing particles having a mean diameter from 10 to 60 μm .

Claim 11, which is illustrative of the subject matter on appeal, reads as follows:

11. A process for making carbohydrate partial esters having a degree of esterification of from 1 to 6 comprising:

(a) providing a catalytically active mixture containing:

- (i) an alkali metal carbonate; and
- (ii) a fatty acid lower alkyl ester corresponding to formula (I):



wherein R^1CO is a linear or branched, saturated or unsaturated acyl group having from 6 to 22 carbon atoms, and R^2 is a linear or branched alkyl group containing from 1 to 5 carbon atoms;

(b) providing an emulsifier mixture containing:

- (iii) a glycoside component having from 5 to 12 carbon atoms; and
- (iv) a carbohydrate partial ester; and

(c) combining the catalytically active mixture with the emulsifier mixture, with vigorous stirring, to form an emulsion/dispersion containing particles having a mean diameter of from 10 to 60 μm .

The Prior Art

The examiner relies on the following prior art reference:

Yamamoto et al. (Yamamoto)	4,611,055	Sep. 9, 1986
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The Rejection

The previously entered rejection of claims 11 through 20 under 35 U.S.C. § 102(b) as anticipated by Yamamoto has been withdrawn (Examiner's Answer, Paper No. 14, section (6)).

The question remaining is whether the examiner erred in rejecting claims 11 through 20 under 35 U.S.C. § 103(a) as unpatentable over Yamamoto.

Deliberations

Our deliberations in this matter have included evaluation and review of the following materials: (1) the instant specification, including all of the claims on appeal; (2) applicants' Appeal Brief (Paper No. 13) and Reply Brief (Paper No. 15); (3) the Examiner's Answer (Paper No. 14); and (4) the above-cited Yamamoto reference.

On consideration of the record, including the above-listed materials, we reverse the examiner's rejection under 35 U.S.C. § 103(a).

Discussion

According to the examiner, the process sought to be patented in claim 11 bears close relationship to the process disclosed by Yamamoto. Specifically, the examiner points to Example 2 of Yamamoto which discloses reacting a molten mixture of

sucrose, methyl oleate, sucrose oleate (degree of substitution of 1.5) and sodium carbonate at 150°C under a vacuum of 3 mmHg with stirring at a linear speed of 3 m/sec. for 1.5 hours. The examiner argues that the reagents recited in claim 11 "read on" the reagents used in Example 2 of Yamamoto; and that the difference between these respective processes is "the order of combining reagents" (Paper No. 14, page 4, last paragraph).

Claim 11 requires a specific order of combining reagents, viz., providing a catalytically active mixture containing an alkali metal carbonate and a fatty acid lower alkyl ester having formula (I); providing an emulsifier mixture containing a glucose component having from 5 to 12 carbon atoms and a carbohydrate partial ester; and combining the catalytically active mixture with the emulsifier mixture, with vigorous stirring, to form an emulsion/dispersion containing particles having a mean diameter from 10 to 60 μm . In Example 2, Yamamoto discloses that a 3 liter flask was charged with 221.3 g of sucrose, 1501.0 g of methyl oleate, 200.0 g of sucrose oleate (D.S. of 1.5), and 77.7 g of sodium carbonate. The mixture was heated with stirring to a molten state, then reacted at 150° C under a vacuum of 3 mmHg with stirring at a linear speed of 3 m/sec. for 1.5 hours.

In an effort to bridge the difference between applicants' claimed process and the process disclosed by Yamamoto, the examiner appears to invoke a per se rule of obviousness. As stated in Paper No. 14, page 4, last paragraph, "it is prima facie

obvious to change the sequence of adding reagents in the absence of new or unexpected results." Again, referring to MPEP § 2144.04 IV. C. "and the case law cited therein," the examiner argues that "in the absence of new or unexpected results, a change is [sic] the sequence of adding ingredients in a process is prima facie obvious" (id. at page 6, last paragraph).

We caution, however, that reliance on per se rules of obviousness is legally incorrect. As stated in In re Ochiai, 71 F.3d 1565, 1572, 37 USPQ2d 1127, 1133 (Fed. Cir. 1995)

The use of per se rules, while undoubtedly less laborious than a searching comparison of the claimed invention--including all its limitations--with the teachings of the prior art, flouts section 103 and the fundamental case law applying it. Per se rules that eliminate the need for fact-specific analysis of claims and prior art may be administratively convenient for PTO examiners and the Board. Indeed, they have been sanctioned by the Board as well. But reliance on per se rules of obviousness is legally incorrect and must cease.

We also note In re Cofer, 354 F.2d 664, 667, 148 USPQ 268, 271 (CCPA 1966), stating that "it is facts appearing in the record, rather than prior decisions in and of themselves, which must support the legal conclusion of obviousness under 35 U.S.C. § 103."

On this record, the examiner has not established that the cited prior art would have led a person having ordinary skill to the invention recited in claim 11 including (a) providing a catalytically active mixture containing an alkali metal carbonate and a fatty acid lower alkyl ester having formula (I); (b) providing an emulsifier mixture containing a glycoside component having from 5 to 12 carbon atoms, and a carbohydrate

partial ester; and (c) combining the catalytically active mixture with the emulsifier mixture, with vigorous stirring. Nor has the examiner established that the cited prior art discloses or suggests a process of forming an emulsion/dispersion containing particles having a mean diameter from 10 to 60 μm . Although the examiner relies heavily on Yamamoto's Example 2, nonetheless, the examiner does not and cannot point to any disclosure in that example suggesting the specific order or sequence of combining reagents spelled out in claim 11.

The examiner refers to MPEP § 2144.04 IV. C. "and the case law cited therein" (Paper No. 14, page 6, last paragraph), but does not specifically apply the facts and holding of any reported case to the facts before us. In this regard, we invite attention to Ex parte Rubin, 128 USPQ 440 (Bd. App. 1959), cited in MPEP § 2144.04 IV. C. In Rubin, the difference between the claimed method and closest prior art was said to be "reversing the order of steps" (id., at 442). But the posture of the case presented to the merits panel in Rubin was different from the case presented before us. As stated id. at 441-42:

appellant has not attempted to refute the examiner's position that it is not inventive to change the order of steps. In fact, appellant concedes that the same product is obtained by either the method claimed herein or that claimed in the patent. Moreover, appellant, on page 5 of the brief, states that:

"The method described in the patent is considered the better of the two methods invented, but the method set forth in the instant case does perform satisfactorily."

In the case before us, applicants make no such concession. Applicants argue that the relationship between the process recited in claim 11 and the process disclosed by Yamamoto in Example 2 involves more than simply "reversing the order of steps;" and

that the cited prior art would not have led a person having ordinary skill to the invention recited in claim 11 including the specific order or sequence of combining reagents required by that claim. Therefore, Ex parte Rubin is distinguishable from the present case.

MPEP § 2144.04 IV. C. also cites In re Burhans, 154 F.2d 690, 69 USPQ 330 (CCPA 1946) and In re Gibson, 39 F.2d 975, 5 USPQ 230 (CCPA 1930), for the proposition that selecting any order of performing process steps or mixing ingredients would have been prima facie obvious. Again, the examiner has not favored the record with a discussion of Burhans or Gibson. The examiner has not compared the facts in those cases with the facts before us, or explained why those cases should be controlling. In this regard, we note that (1) the present case involves unpredictable factors including catalytic chemistry; and (2) the examiner has not compared the degree of unpredictability of the factors involved in the present case with those involved in Burhans (method of making genuine whole wheat flour) or in Gibson (process of forming a mix for brake shoe fillers). See In re Angstadt, 537 F.2d 498, 503, 190 USPQ 214, 218 (CCPA 1976) ("many chemical processes, and catalytic processes particularly, are unpredictable"); and In re Mercier, 515 F.2d 1161, 1168, 185 USPQ 774, 779 (CCPA 1975) ("[t]he unpredictability of catalytic phenomena has long been recognized by this court").

Error in Applicants' Reply Brief

In passing, we note an apparent error in applicants' Reply Brief stating that

Yamamoto, on the other hand, at col. 4, lines 6-8 discloses the use of from 4 to 15, and preferably 8 to 15 moles of sucrose per mole of fatty acid lower alkyl ester [Paper No. 15, page 3, lines 3-5].

In fact, Yamamoto discloses that

From 4 to 15 moles, preferably from 8 to 15 moles per mole of sucrose of fatty acid lower alkyl esters are used [Yamamoto, column 4, lines 6-8].

Conclusion

In conclusion, the examiner has not established that Yamamoto would have led a person having ordinary skill in the art to the claimed process including the specific order or sequence of combining reagents required by the claims. Accordingly, on this record, the examiner has not established a prima facie case of obviousness of claims 11 through 20 based on Yamamoto.

The examiner's decision is reversed.

REVERSED

Sherman D. Winters
Administrative Patent Judge

William F. Smith
Administrative Patent Judge

Demetra J. Mills
Administrative Patent Judge

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